Section 1. Registration Information

Source Identification

Facility Name: Ajinomoto Heartland, Inc.

Parent Company #1 Name: Ajinomoto Animal Nutrition Group, Inc.

Parent Company #2 Name:

Submission and Acceptance

Submission Type: Re-submission

Subsequent RMP Submission Reason: 5-year update (40 CFR 68.190(b)(1))

Description:

Receipt Date: 26-May-2014
Postmark Date: 26-May-2014
Next Due Date: 26-May-2019
Completeness Check Date: 26-May-2014

Complete RMP: Yes

De-Registration / Closed Reason:

De-Registration / Closed Reason Other Text:

De-Registered / Closed Date:

De-Registered / Closed Effective Date:

Certification Received: Yes

Facility Identification

EPA Facility Identifier: 1000 0012 2707
Other EPA Systems Facility ID: 52553HRTLNHIGHW

Dun and Bradstreet Numbers (DUNS)

Facility DUNS: 114172596 Parent Company #1 DUNS: 691499824

Parent Company #2 DUNS:

Facility Location Address

Street 1: 1116 Highway 137

Street 2:

 City:
 Eddyville

 State:
 IOWA

 ZIP:
 52553

 ZIP4:
 8526

 County:
 MONROE

Facility Latitude and Longitude

Latitude (decimal): 41.14333 Longitude (decimal): -92.649167

Lat/Long Method: Interpolation - Photo
Lat/Long Description: Administrative Building

Horizontal Accuracy Measure: 25

Horizontal Reference Datum Name: North American Datum of 1983

Source Map Scale Number: 24000

Owner or Operator

Operator Name: Ajinomoto Heartland, Inc.

Operator Phone: (641) 969-4551

Mailing Address

Operator Street 1: 1116 Highway 137

Operator Street 2:

Operator City:EddyvilleOperator State:IOWAOperator ZIP:52553Operator ZIP4:8526

Operator Foreign State or Province:

Operator Foreign ZIP: Operator Foreign Country:

Name and title of person or position responsible for Part 68 (RMP) Implementation

RMP Name of Person: Mark Wilson

RMP Title of Person or Position: Environmental Specialist RMP E-mail Address: wilsonm@ajiusa.com

Emergency Contact

Emergency Contact Name:Randy SchreinerEmergency Contact Title:Plant ManagerEmergency Contact Phone:(641) 969-3225Emergency Contact 24-Hour Phone:(641) 969-4551

Emergency Contact Ext. or PIN: 221

Emergency Contact E-mail Address: schreinerr@ajiusa.com

Other Points of Contact

Facility or Parent Company E-mail Address: bercovicid@ajiusa.com

Facility Public Contact Phone: (773) 380-7000

Facility or Parent Company WWW Homepage www.lysine.com Address:

Local Emergency Planning Committee

LEPC: Monroe County LEPC

Full Time Equivalent Employees

Number of Full Time Employees (FTE) on Site: 117

FTE Claimed as CBI:

Covered By

OSHA PSM: Yes EPCRA 302: Yes CAA Title V: Yes

Air Operating Permit ID: 00-TV-028R1M001

Plan Sequence Number: 1000041503

Plan Sequence Number: 1000041503

OSHA Ranking

OSHA Star or Merit Ranking:

Last Safety Inspection

Last Safety Inspection (By an External Agency)

Date:

Last Safety Inspection Performed By an External

Agency:

03-Dec-2013

Travelers Insurance

Predictive Filing

Did this RMP involve predictive filing?:

Preparer Information

Preparer Name:

Preparer Phone:

Preparer Street 1:

Preparer Street 2:

Preparer City:

Preparer State: Preparer ZIP:

Preparer ZIP4:

Preparer Foreign State:

Preparer Foreign Country:

Preparer Foreign ZIP:

Confidential Business Information (CBI)

CBI Claimed:

Substantiation Provided:

Unsanitized RMP Provided:

Reportable Accidents

Reportable Accidents:

See Section 6. Accident History below to determine if there were any accidents reported for this RMP.

Process Chemicals

Process ID: 1000051117

Description: manufacturing amino acids

Process Chemical ID: 1000061942

Program Level: Program Level 3 process
Chemical Name: Ammonia (anhydrous)

CAS Number: 7664-41-7

Quantity (lbs): 390000

CBI Claimed:

Flammable/Toxic: Toxic

Process NAICS

Process ID: 1000051117
Process NAICS ID: 1000051618

Program Level: Program Level 3 process

NAICS Code: 311119

NAICS Description: Other Animal Food Manufacturing

Section 2. Toxics: Worst Case

Toxic Worst ID: 1000041721

Percent Weight: 100.0

Physical State: Gas liquified by pressure Model Used: EPA's RMP*Comp(TM)

Release Duration (mins): 10
Wind Speed (m/sec): 1.5
Atmospheric Stability Class: F
Topography: Urban

Passive Mitigation Considered

Dikes:
Enclosures:
Berms:
Drains:
Sumps:

Other Type:

Section 3. Toxics: Alternative Release

Toxic Alter ID: 1000044230

Percent Weight: 100.0

Physical State: Gas liquified by pressure Model Used: EPA's RMP*Comp(TM)

Wind Speed (m/sec): 3.0
Atmospheric Stability Class: D
Topography: Urban

Passive Mitigation Considered

Dikes:
Enclosures:
Berms:
Drains:
Sumps:
Other Type:

Active Mitigation Considered

Sprinkler System:
Deluge System:
Water Curtain:
Neutralization:
Excess Flow Valve:

Flares: Scrubbers:

Emergency Shutdown:

Other Type:

Data displayed is accurate as of 12:00 AM (EDT) Tuesday, June 03, 2014

Plan Sequence Number: 1000041503

Section 4. Flammables: Worst Case

No records found.

Plan Sequence Number: 1000041503

Section 5. Flammables: Alternative Release

No records found.

Plan Sequence Number: 1000041503

Section 6. Accident History

No records found.

Plan Sequence Number: 1000041503

Section 7. Program Level 3

Description

The Ajinomoto Heartland LLC ammonia release prevention program consists of the following: collecting process safety information, conducting a process hazard analysis, developing written operating procedures, training staff, conducting periodic mechanical integrity inspections, following a management of change procedure, conducting pre-start up safety reviews before starting a new covered process, conducting periodic compliance audits, investigating release incidents, facilitating employee participation, following a hot work permit procedure, and qualifying contractors.

Program Level 3 Prevention Program Chemicals

1000051948 Prevention Program Chemical ID:

Chemical Name: Ammonia (anhydrous)

Flammable/Toxic: Toxic CAS Number: 7664-41-7

Prevention Program Level 3 ID: 1000043403 NAICS Code: 311119

Safety Information

Safety Review Date (The date on which the safety information was last reviewed or revised):

18-May-2012

Process Hazard Analysis (PHA)

PHA Completion Date (Date of last PHA or PHA

update):

18-May-2012

The Technique Used

What If: Yes Checklist: Yes

What If/Checklist:

HAZOP:

Failure Mode and Effects Analysis:

Fault Tree Analysis: Other Technique Used:

PHA Change Completion Date (The expected or actual date of completion of all changes resulting from last PHA or PHA update):

30-Nov-2014

Major Hazards Identified

Toxic Release: Yes

Fire:

Explosion:

Runaway Reaction: Polymerization:

Overpressurization: Yes

Corrosion:

Overfilling: Yes

Plan Sequence Number: 1000041503

Contamination:

Yes **Equipment Failure:**

Loss of Cooling, Heating, Electricity, Instrument Air:

Earthquake:

Floods (Flood Plain):

Tornado: Hurricanes:

Other Major Hazard Identified:

Process Controls in Use

Vents:

Relief Valves: Yes Check Valves: Yes Scrubbers: Yes

Flares:

Manual Shutoffs: Yes Automatic Shutoffs: Yes

Interlocks:

Alarms and Procedures: Yes

Keyed Bypass:

Emergency Air Supply: **Emergency Power:** Backup Pump: Grounding Equipment:

Inhibitor Addition: Rupture Disks:

Excess Flow Device:

Quench System: Purge System:

None:

Other Process Control in Use:

Mitigation Systems in Use

Sprinkler System:

Dikes: Yes

Fire Walls: Blast Walls: Deluge System: Water Curtain: Enclosure: Neutralization:

None:

Other Mitigation System in Use:

Monitoring/Detection Systems in Use

Process Area Detectors: Yes

Perimeter Monitors:

None:

Other Monitoring/Detection System in Use: patrols, CCTV surveillance camera

Yes

Changes Since Last PHA Update

Plan Sequence Number: 1000041503

Reduction in Chemical Inventory:

Increase in Chemical Inventory:

Change Process Parameters:

Installation of Process Controls:

Installation of Process Detection Systems: Installation of Perimeter Monitoring Systems:

Installation of Mitigation Systems:

None Recommended: Yes

None:

Other Changes Since Last PHA or PHA Update:

Review of Operating Procedures

Operating Procedures Revision Date (The date of the most recent review or revision of operating procedures): 06-Nov-2013

Training

Training Revision Date (The date of the most recent 06-Dec-2011 review or revision of training programs):

The Type of Training Provided

Classroom: Yes On the Job: Yes

Other Training:

The Type of Competency Testing Used

Written Tests:

Oral Tests: Yes
Demonstration: Yes
Observation: Yes

Other Type of Competency Testing Used:

Maintenance

Maintenance Procedures Revision Date (The date of 17-Jul-2009 the most recent review or revision of maintenance procedures):

Equipment Inspection Date (The date of the most recent equipment inspection or test):

12-Jun-2012

Equipment Tested (Equipment most recently inspected or tested):

NH3 tank PSVs

Management of Change

Change Management Date (The date of the most recent change that triggered management of change procedures):

11-Feb-2013

Plan Sequence Number: 1000041503

Change Management Revision Date (The date of the most recent review or revision of management of change procedures):

Pre-Startup Review

Pre-Startup Review Date (The date of the most recent pre-startup review):

13-Dec-2013

Compliance Audits

Compliance Audit Date (The date of the most recent 08-Sep-2011 compliance audit):

Compliance Audit Change Completion Date (Expected or actual date of completion of all changes resulting from the compliance audit):

31-Oct-2014

Incident Investigation

Incident Investigation Date (The date of the most recent incident investigation (if any)):

07-May-2004

Incident Investigation Change Date (The expected or actual date of completion of all changes resulting from the investigation):

07-Aug-2004

Employee Participation Plans

Participation Plan Revision Date (The date of the most recent review or revision of employee participation plans):

04-Nov-2013

Hot Work Permit Procedures

Hot Work permit Review Date (The date of the most 04-Nov-2013 recent review or revision of hot work permit procedures):

Contractor Safety Procedures

Contractor Safety Procedures Review Date (The date of the most recent review or revision of contractor safety procedures):

04-Nov-2013

Contractor Safety Performance Evaluation Date (The date of the most recent review or revision of contractor safety performance):

11-Jul-2002

Confidential Business Information

CBI Claimed:

Plan Sequence Number: 1000041503

Section 8. Program Level 2

Plan Sequence Number: 1000041503

Section 9. Emergency Response

Written Emergency Response (ER) Plan

Community Plan (Is facility included in written community emergency response plan?):

Yes

Facility Plan (Does facility have its own written emergency response plan?):

Yes

Response Actions (Does ER plan include specific actions to be taken in response to accidental releases of regulated substance(s)?):

Yes

Public Information (Does ER plan include procedures for informing the public and local agencies responding to accidental release?):

Yes

Healthcare (Does facility's ER plan include information on emergency health care?):

Yes

Emergency Response Review

Review Date (Date of most recent review or update 06-Jan-2014 of facility's ER plan):

Emergency Response Training

Training Date (Date of most recent review or update 17-Mar-2014 of facility's employees):

Local Agency

Agency Name (Name of local agency with which the Eddyville Volunteer Fire Department facility ER plan or response activities are coordinated):

Agency Phone Number (Phone number of local agency with which the facility ER plan or response activities are coordinated):

(641) 969-4870

Subject to

OSHA Regulations at 29 CFR 1910.38: Yes

OSHA Regulations at 29 CFR 1910.120:

Clean Water Regulations at 40 CFR 112: Yes RCRA Regulations at CFR 264, 265, and 279.52: Yes OPA 90 Regulations at 40 CFR 112, 33 CFR 154,

49 CFR 194, or 30 CFR 254:

State EPCRA Rules or Laws: Yes

Other (Specify):

Executive Summary

The Facility and the Regulated Substances Handled

Ajinomoto Heartland, Inc. is a manufacturer of feed grade L-lysine and L-threonine. Both compounds are amino acids used in pork and poultry animal feed and in pet foods to improve the nutritional content of the livestock feed or the pet food. The amino acids are manufactured using an industrial fermentation process. The primary raw material for the fermentation process is glucose, which is derived from corn. The amino acids are extracted, purified, and packaged for distribution throughout North America. Some product is exported to foreign countries.

Anhydrous ammonia, which is covered under the EPA Risk Management Plan, is used at the Ajinomoto Heartland facility. Ammonia is used for pH control in the fermentation process and in the extraction process.

The Accidental Release Prevention and Emergency Response Policies at Our Facility

Ajinomoto Heartland, Inc. is committed protecting our employees, the public, and the environment from the risks associated with the use of hazardous industrial chemicals, including anhydrous ammonia.

We have taken steps to ensure that anhydrous ammonia is handled safely at our facility. Mechanical systems are inspected and tested to ensure safe and proper operations. Our employees are trained in the safe handling of ammonia. Approximately 75% of our employees have been trained to the HazMat Technician level, which allows quick response to any chemical release situation that may develop.

The General Accidental Release Prevention Program and Chemical-Specific Prevention Steps

Regarding anhydrous ammonia, Ajinomoto Heartland, Inc. is regulated under OSHA's Process Safety Management (PSM) Program and EPA's Risk Management Plan (RMP). Under these programs, we have developed and implemented procedures and we have installed equipment to help minimize the risk of an accidental release of anhydrous ammonia. These items include:

- 1. Periodic mechanical integrity testing of ammonia systems.
- 2. Periodic employee training on the hazards and safe handling of ammonia.
- 3. Collecting process safety information on anhydrous ammonia.
- 4. Conducting periodic process hazard analyses of the ammonia systems.
- 5. Development of written operating procedures for working with anhydrous ammonia.
- 6. Development of a management of change procedure for anhydrous ammonia systems.
- 7. Conducting pre-start up safety reviews of new processes that use anhydrous ammonia.
- 8. Conducting periodic compliance audits of the OSHA PSM and EPA RMP programs.
- 9. Promptly investigating any anhydrous ammonia release incidents and recommending changes to prevent such incidents.
- 10. Requiring employee participation in the development of safety programs.
- 11. Using hot work permits when conducting welding or cutting activities near anhydrous ammonia.
- 12. Qualifying contractors used to work on anhydrous ammonia systems.
- 13. Engineering and constructing anhydrous ammonia systems that are compliant with current engineering and industry standards.
- 14. Development and implementation of an Environmental Management Program under ISO 14001.
- 15. Administrative controls to prevent overfilling of anhydrous ammonia tanks.
- 16. Installation of ammonia leak sensors.
- 17. Installation of remote switches for emergency shutdown of the anhydrous ammonia system.
- **The Five-Year Accident History**

In the last five years, there have been no anhydrous ammonia releases at the Ajinomoto Heartland, Inc. facility that meet the criteria for a reportable release as specified in 40 CFR 68.42.

The Emergency Response Program

In the event of a release of anhydrous ammonia, Ajinomoto Heartland, Inc. is prepared to respond.

Procedures are in place to promptly alert our employees, contractors, public safety officials, the Iowa Department of Natural Resources (IDNR), and the National Response Center in the event of a hazardous material release. We have made preparations to have the necessary safety information available for all stakeholders in the event of an accidental hazardous material release.

Ajinomoto Heartland, Inc. has coordinated with the Eddyville Volunteer Fire Department. The local Fire Department is aware of the

Facility Name: Ajinomoto Heartland, Inc.

EPA Facility Identifier: 1000 0012 2707 Plan Sequence Number: 1000041503

hazardous chemicals used at our facility and they have toured our facility. Local industries and local emergency responders, including the Eddyville Volunteer Fire Department, have participated in periodic drills with Ajinomoto Heartland, Inc.

The Ajinomoto Heartland, Inc. facility has coordinated with the Monroe County Local Emergency Planning Commission (LEPC) and is included in the Monroe County Emergency Operations Plan (EOP). We have coordinated with the South East Iowa Response Group (Haz Mat Team) in Ottumwa, Iowa, located approximately 17 miles away.

Ajinomoto Heartland, Inc. employees have been trained on haz mat response, spill reporting, and notifying the necessary public safety authorities to alert the public.

Ajinomoto Heartland, Inc. has the necessary equipment on site to deal with anticipated emergencies. Employees have access to and are trained in the proper use of Class A fully contained encapsulated chemical suits with self contained breathing equipment. If a haz mat release escalates, our local volunteer fire department can contact the South East Iowa Response Group (Haz Mat Team) in Ottumwa, Iowa for assistance.

Planned Changes to Improve Safety

Improving industrial chemical safety is a never ending process. We are continuously striving to improve our safety practices at Ajinomoto Heartland, Inc. As changes in technology, techniques, or procedures present themselves, they will be examined and considered for implementation to improve the level of our safety as related to handling anhydrous ammonia.